#2433 Store at -20°C

Calnexin Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #821
Swiss-Prot Acc. #P27824

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IHC-P, IF-IC	H	90 kDa	Rabbit**
Endogenous			

Background: Secretory and transmembrane proteins are synthesized on polysomes and translocate into the endoplasmic reticulum (ER) where they are often modified by the formation of disulfide bonds and amino-linked glycosylation and folding. To help proteins fold properly, the ER contains a pool of molecular chaperons including calnexin. Calnexin was identified as being involved in the assembly of murine class I histocompatibility molecules (1,2). Calnexin is a calcium-binding protein embedded in the ER membrane that retains the newly synthesized glycoproteins inside ER to ensure their proper folding and quality control (3,4,5). A lectin site on calnexin for an oligosaccharide processing intermediate defines its specificity for glycoproteins (5).

Specificity/Sensitivity: Calnexin Antibody detects endogenous levels of total calnexin protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a sequence around Ala51 of human calnexin. Antibodies are purified by protein A and peptide affinity chromatography.

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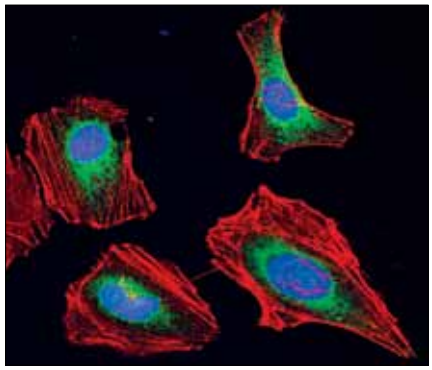
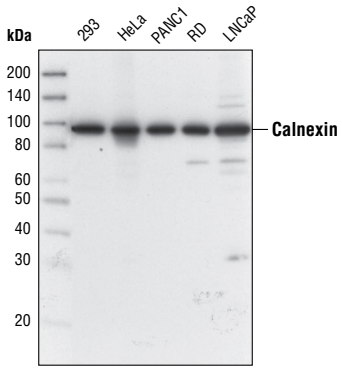
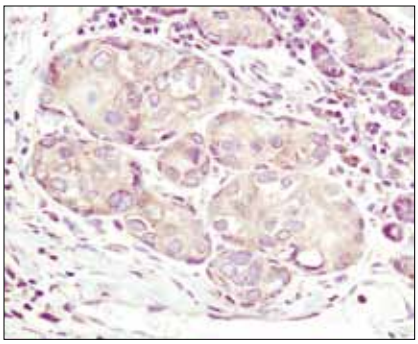


Confocal immunofluorescent analysis of HeLa cells using Calnexin Antibody (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).



Western blot analysis of extracts from various cell lines using Calnexin Antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Calnexin Antibody.

Storage: Supplied in 10mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C.
Do not aliquot the antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunohistochemistry (Paraffin)	1:50†
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114

†*Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.*

Immunofluorescence (IF-IC)	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

(1) Degen, E. and Williams, D.B. (1991) *J. Cell Biol.* 112, 1099–1115.

(2) Ahluwalia, N. et al. (1992) *J. Biol. Chem.* 267, 10914–10918.

(3) Rajagopalan, S. et al. (1994) *Science* 263, 387–390.

(4) Bergeron, J.J. et al. (1994) *Trends Biochem. Sci.* 19, 124–128.

(5) Williams, D.B. (2006) *J. Cell Sci.* 119, 615–623

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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